

# Grants Mining District

**Abandoned Uranium Mines in  
Northwestern New Mexico  
June 2011**



# Overview

1. Structural Assessment
2. Site Assessment
3. Jack Pile Mine
4. Homestake Mine
5. United Nuclear Corporation/NE Churchrock
6. Action Plan

# Structural Assessment

## 1. 451 exterior structures assessed

- 5 structures require partial or complete demolition
- Limited soil/mine material removal at properties, as warranted

## 2. 209 interior structures tested for radon

- 69 structures exceed recommended radon concentration

## 3. (b) (6) property relocation response

- Residence constructed on mill tailings
- Private water supply contaminated

# Site Assessment

## 1. Preliminary Mine Screening

- 60 of 97 mines screened

## 2. Site Assessment

- 8 mines currently being assessed for risk
- 2 removal actions underway

## 3. Data collection to identify PRPs

- Begin targeted media sampling at 3 mine sites in August 2011

# Jack Pile Mine

## 1. Preliminary Assessment

- Completed February 2010

## 2. Site Inspection

- Completed June 2010

## 3. Expanded Site Inspection

- On-going in 2011

## 4. Potential for the National Priorities List

- Under evaluation

# Homestake Mining Company Superfund Site

## 1. Off-site Human Health Risk Assessment

- Began multi-media sampling (gamma scanning, indoor and outdoor radon, soil, vegetation, ground water) and assessment of structures in September 2010
- Over 1500 samples to be collected
- Data so far indicates that eleven homes exceed 4 pci/L EPA guidance for radon mitigation
- Final risk assessment report will be completed in March 2012

## 2. Remediation improvements

- EPA completed a Remedy System Evaluation (RSE) in December 2010 with 18 recommendations
- EPA issued a letter to NRC in March 2011 to implement 14 of these recommendations

# United Nuclear Corporation/NE Churchrock

## 1. Groundwater remediation for UNC

- Not addressed in the original decision document
- Decision amendment in 2013

## 2. Waste rock relocation for NE Churchrock

- Feasible alternatives are being evaluated
- Decision expected Fall 2011

# Action Plan

Action	Phase	Cost	Schedule
GW Investigation	Ambrosia Lake	\$ 5.0 M	2011-2013
	Response	25.0 M	2013-2016
Residences	Structures	1.5 M	2011-2015
	Radon Mitigation	1.0 M	2012-2013
	Contaminated Soil	10.0 M	2012-2015
Abandoned Mines	Preliminary Screen	0.5 M	2011
	Site Assessment	2.0 M	2011-2015
	Enforcement data	5.0 M	2011-2015
	Response	5.0 M	2011-2015
Jack Pile Mine	NPL Determination	-----	2012
	Enf/RIFS/ROD	5.0-10.0 M	2012-2016
	Enf/RDRA	40.0-250.0 M	2016-2022



# Action Plan -- Continued

Action	Phase	Cost	Schedule
Homestake Mining	HHRA	\$ 0.5 M	2012
	Radon Mitigation	0.15 M	2012-2013
UNC/NE Churchrock	Action Memo	25.0-295.0 M	2011